

## AIR QUALITY PERMIT

Issued To: Naeseth's Redi-Mix  
Box 1078  
Fort Benton, MT 59442

Permit #3247-00  
Complete Application Submitted: 03/26/03  
Preliminary Determination Issued: 04/30/03  
Department Decision Issued: 05/16/03  
Permit Final: 06/03/03  
AFS #777-3247

An air quality permit, with conditions, is hereby granted to Naeseth's Redi-Mix (Naeseth), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### Section I: Permitted Facilities

#### A. Plant Location

Naeseth operates a portable crushing/screening operation that will originally locate in Sections 1 and 12, Township 24 North, Range 8 East, in Chouteau County, Montana. However, Permit #3247-00 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum to this air quality permit will be required if Naeseth intends to locate in or within 10 kilometers (km) of certain PM<sub>10</sub> nonattainment areas.

#### B. Permitted Equipment

Naeseth operates a portable crushing/screening operation. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

### Section II: Limitations and Conditions

#### A. Emissions Limitations

1. Naeseth shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Sources (NSPS) affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR Part 60, Subpart OOO).
2. Naeseth shall not cause or authorize to be discharged into the atmosphere from any other NSPS affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
3. Naeseth shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).

4. Water and spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749 and ARM 17.8.752).
5. Naeseth shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
6. Naeseth shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749 and ARM 17.8.752).
7. Naeseth shall not operate more than one crusher at any given time and the maximum rated design capacity shall not exceed 370 (Tons Per Hour (TPH)) (ARM 17.8.749).
8. Total crushing production from the crusher shall be limited to 3,241,200 tons during any rolling 12-month time period (ARM 17.8.749).
9. Naeseth shall not operate more than two screens at any given time and the combined maximum rated design capacity shall not exceed 740 TPH (ARM 17.8.749).
10. Total screening production from the two screens shall be limited to 6,482,400 tons during any rolling 12-month time period (ARM 17.8.749).
11. Naeseth shall not operate more than two diesel generators and a diesel engine at any given time and the combined maximum rated design capacity shall not exceed 542 kilowatts (kW) (ARM 17.8.749).
12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Naeseth, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
13. Naeseth shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants, as appropriate (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

1. Within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR Part 60.675, must be performed on any NSPS affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340, 40 CFR Part 60, General Provisions and Subpart OOO).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

3. The Department may require further testing (ARM 17.8.105).
- C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).

2. Naeseth shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. Naeseth shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745(1) that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

4. Naeseth shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Naeseth as a permanent business record for at least 5 years following the date of the measurement, shall be available at the plant site for inspection by the Department, and shall be submitted to the Department upon request (ARM 17.8.749).
5. Naeseth shall document, by month, the total crushing production from the crusher. By the 25th day of each month, Naeseth shall total the crushing production during the previous 12 months to verify compliance with the limitation in Section II.A.8. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. Naeseth shall document, by month, the total screening production from the two screens. By the 25th day of each month, Naeseth shall total the screening production during the previous 12 months to verify compliance with the limitation in Section II.A.10. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).

Section III: General Conditions

- A. Inspection – Naeseth shall allow the Department’s representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Naeseth fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving Naeseth of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions, and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals - Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing postpones the effective date of the Department decision until the conclusion of the hearing and issuance of a final decision by the Board. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section.
- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Construction Commencement - Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.
- H. Permit Fee - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay by Naeseth of an annual operation fee may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Naeseth shall comply with the conditions contained in this permit while operating at any location in Montana, except within those areas having a Department approved permitting program.

PERMIT ANALYSIS  
Naeseth's Redi-Mix  
Permit Number 3247-00

I. Introduction/Process Description

A. Permitted Equipment

On March 26, 2003, Naeseth's Redi-Mix (Naeseth) submitted a complete permit application to operate a portable crushing/screening facility and an associated wash plant. The crushing/screening operation consists of one portable crusher (up to 370 tons per hour (TPH)), one screen (up to 370 TPH), one diesel engine (up to 60 kilowatts (kW)), one diesel generator (up to 112-kW), a diesel generator (up to 370-kW), 1 hopper, 3 conveyors, and associated equipment. The wash plant consists of one screen (up to 370 TPH), 2 conveyors, and associated equipment. The wash plant is also powered by the two diesel generators. The original proposed location for the facility is Sections 1 and 12, Township 24 North, Range 8 East, in Chouteau County, Montana. Permit #3247-00 will apply to the source while operating in any location in Montana, except within those areas having a Department of Environmental Quality (Department) approved permitting program. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum to this air quality permit will be required if Naeseth intends to locate in or within 10 kilometers (km) of certain PM<sub>10</sub> nonattainment areas.

B. Process Description

Naeseth proposes to use this crushing/screening plant and wash plant to crush and sort sand and gravel materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant by a hopper and transferred by conveyor to a screen. Materials are separated, with the larger materials conveyed to a crusher and on to stockpile and the smaller materials conveyed to the wash plant. From the wash plant screen, materials are conveyed to stockpile for future use.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary, using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Naeseth shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

Naeseth must comply with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Naeseth shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that

no person shall cause or allow to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60.

In order for a crushing/screening plant to be subject to NSPS requirements, two specific criteria must be met. First, the crushing/screening plant must meet the definition of an affected facility and, second, the equipment in question must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Naeseth, at the time Permit #3247-00 was issued, the crushing/screening equipment to be used under Permit #3247-00 may be subject to New Source Performance Standards (NSPS) requirements (40 CFR Part 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).

D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that Naeseth submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Naeseth submitted the appropriate permit application fee as required for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter, or use any asphalt plant, crusher, or screen that has the potential to emit greater than 15 tons per year of any pollutant. Naeseth has the potential to emit more than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>), oxides of nitrogen (NO<sub>x</sub>), and carbon monoxide (CO); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Naeseth submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Naeseth submitted an affidavit of publication of public notice for the March 19, 2003, issue of the *River Press*, a newspaper of general circulation in the Town of Fort Benton, in Chouteau County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Naeseth of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to



construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of Naeseth, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer, including a Transfer of Location notice and an affidavit of publication from a newspaper of general circulation in the area to be affected. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications-- Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and does not have the potential to emit more than 250 tons per year (excluding fugitive emissions) of any air pollutant.

G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
  - a. Potential to Emit (PTE) > 100 tons/year of any pollutant;
  - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or a lesser quantity as the Department may establish by rule; or
  - c. PTE > 70 tons/year of PM<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in

ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3247-00 for the Naeseth facility, the following conclusions were made:

- a. The facility's PTE is less than 100 tons/year for any pollutant.
- b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
- d. This facility is not subject to any current NESHAP standards.
- e. This facility is probably subject to current NSPS standards (40 CFR 60, Subpart A, General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants).
- f. This source is not a Title IV affected source nor a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Based on the above conclusions, the Department determined that Naeseth is a minor source of emissions as defined under the Title V Operating Permit Program. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Naeseth may be required to obtain a Title V Operating Permit.

### III. Emission Inventory

Source	Tons/Year					
	PM	PM <sub>10</sub>	NO <sub>x</sub>	VOC	CO	SO <sub>x</sub>
Crusher (up to 370 TPH)	4.05	1.94				
Screen (up to 370 TPH)	25.52	12.15				
Material Transfer	11.75	5.67				
Pile Forming	6.81	3.24				
Bulk Loading	6.81	3.24				
Wash Plant Screen (up to 370 TPH)	15.31	7.29				
Wash Plant Material Transfer	2.82	1.36				
Wash Plant Pile Forming	8.17	3.89				
Wash Plant Bulk Loading	4.08	1.94				
Diesel Engine (80 HP)	0.77	0.77	10.86	0.87	2.34	0.72
Diesel Generator (up to 150 HP)	1.45	1.45	20.37	1.62	4.39	1.35
Diesel Generator (up to 370 KW)	4.78	4.78	67.37	5.37	14.52	4.46
Haul Roads	2.74	1.23				
Total	95.06	48.95	98.60	7.86	21.25	6.53

- A complete emission inventory for Permit #3247-00 is on file with the Department.

### IV. BACT Determination

A BACT determination is required for any new or modified source. Naeseth shall install on the

new or modified source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be used. The Department reviewed previous BACT determinations for other recently permitted similar sources prior to making the following BACT determinations.

Naeseth shall not cause or authorize to be discharged into the atmosphere from any NSPS affected crusher any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes. Naeseth shall not cause to be discharged into the atmosphere from any other NSPS affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. Naeseth shall not cause to be discharged into the atmosphere from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. Naeseth must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general plant property. Naeseth is required to use water spray bars and water and/or chemical dust suppressant, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. The Department determined that using water spray bars and water and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for these sources.

Because of the amount of NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub> emissions produced by the two diesel generators and one diesel engine, add-on controls would be cost prohibitive. Thus, the Department determined that no additional control would constitute BACT for the three power units. The control options selected have controls and control costs similar to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

#### V. Existing Air Quality

Permit #3247-00 is issued for the operation of a portable crushing/screening plant to be originally located in Sections 1 and 12, Township 24 North, Range 8 East, in Chouteau County, Montana. This facility would be allowed to operate at this proposed site and any other areas designated as attainment or unclassified for all National Ambient Air Quality Standards (NAAQS).

#### VI. Air Quality Impacts

Permit #3247-00 will cover the operation while operating at any location within Montana, excluding those areas that have a Department approved permitting program or those locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts will be minor and short-lived.

#### VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, Montana Code Annotated (MCA), the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

#### VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY  
Permitting and Compliance Division  
Air and Waste Management Bureau  
1520 East Sixth Avenue  
P.O. Box 200901  
Helena, Montana 59620-0901  
(406) 444-3490

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

*Issued For:* Naeseth's Redi-Mix  
Box 1078  
Fort Benton, MT 59442

*Permit Number:* #3247-00

*Preliminary Determination Issued:* April 30, 2003

*Department Decision Issued:* May 16, 2003

*Permit Final:* June 3, 2003

1. *Legal Description of Site:* Naeseth submitted an application to operate a portable crushing/screening plant and wash plant in Sections 1 and 12, Township 24 North, Range 8 East, in Chouteau County, Montana. Permit #3247-00 would apply while operating at any location in Montana, except within those areas having a Department approved permitting program. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* An addendum to this air quality permit will be required if Naeseth intends to locate in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas.
2. *Description of Project:* The permit application proposes the construction and operation of a portable crushing/screening plant and wash plant that would consist of a portable crusher (up to 370 tons per hour (TPH)), one screen (up to 370 TPH), one diesel engine (up to 60 kilowatts (kW)), a diesel generator (up to 112-kW), a diesel generator (up to 370-kW), 1 hopper, 3 conveyors, and associated equipment. The wash plant would consist of one screen (up to 370 TPH), 2 conveyors, and associated equipment. The wash plant would be also powered by the two diesel generators.
3. *Objectives of Project:* Naeseth, in an effort to generate business and revenue for the company, by the sale and use of the aggregate, submitted a complete permit application for the crushing/screening plant. The issuance of Permit #3247-00 would allow Naseth to operate at various locations throughout Montana, including the proposed initial site location.
4. *Additional Project Site Information:* In many cases, the crushing/screening operation may move to a general site location or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, a more extensive EA would have been conducted and would be found in the Mined Land Reclamation Permit issued by the IEMB for that specific site.
5. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Naeseth demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls:* A listing of the enforceable permit conditions and a permit analysis, including a Best Available Control Technology (BACT) analysis, would be contained in Permit #3247-00.
7. *Regulatory Effects on Private Property Rights:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.
8. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no action alternative” was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
B.	Water Quality, Quantity, and Distribution			X			yes
C.	Geology and Soil Quality, Stability, and Moisture			X			yes
D.	Vegetation Cover, Quantity, and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource				X		yes
H.	Demands on Environmental Resource of Water, Air, and Energy			X			yes
I.	Historical and Archaeological Sites			X			yes
J.	Cumulative and Secondary Impacts			X			yes

**Summary of Comments on Potential Physical and Biological Effects:** The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the crushing/screening operations. The crushing/screening operations would be considered a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Therefore, only minor effects to terrestrial life would be expected as a result of equipment operations or from pollutant deposition.

Impacts to aquatic life would result from water runoff and pollutant deposition, but any impacts would be minor as the facility would be a minor source of emissions, by industrial standards, with intermittent and seasonal operations. Since good dispersion of air pollutants would occur in the proposed area of operation, only minor pollutant deposition would occur. At the initial site location, the nearest surface water is an intermittent stream that is approximately ¼ mile away

and the water from it flows towards the Teton River (1/3 mile away). Because of the small amount of deposition that would occur and the distance to the nearest surface water, any impacts to the aquatic life would be minor.

B. Water Quality, Quantity, and Distribution

Water would be used for dust suppression on the surrounding roadways, areas of operation, and for pollution control on equipment operations, but would only cause a minor disturbance to the area since relatively small amounts of water would be needed. Any impacts from this proposed project would be minor as a result of using water for dust suppression and equipment operations, because only relatively small amounts of water would be required, the project would be temporary and intermittent in nature, and water would be captured and reused for pollution control.

Further, equipment operations would result in the emission of air pollutants, which would disperse to surrounding water resources. However, as previously stated, emissions from the facility would be relatively minor, intermittent, and short-lived. Additionally, water used within the gravel pit would be controlled and water would be recycled for pollution control. Thus, any impacts from pollutant deposition or from equipment operations on surface or groundwater resources would be minor and only minor impacts to water quality, quantity, and distribution in the area would occur.

C. Geology and Soil Quality, Stability, and Moisture

There would be minor impacts to the geology and soil quality, stability, and moisture near the crushing/screening area due to facility's construction and use, increase in vehicle traffic, and the use of water to control dust and deposition of pollutants from the crushing/screening operation. Because the source is relatively small by industrial standards, portable, and equipment operations would take place within a previously disturbed gravel pit, any associated impacts to soil stability and composition would be minor. Minor increases in traffic would occur, but would be on an intermittent and temporary basis and would be primarily on existing roadways - resulting in minimal impacts to the soil quality, stability, and moisture in the area. Further, only relatively small amounts of water would need to be applied to control dust on the surrounding roadways, for the facilities pollution control operations, and for dust control within the gravel pit. Thus, the soil moisture content, soil stability, and soil quality would only be minimally affected by the proposed project.

D. Vegetation Cover, Quantity, and Quality

Because the facility would operate in an existing open-cut pit, would operate in an area where good pollutant dispersion would occur, would be a minor source of emissions, and would be temporary in nature, impacts to vegetation cover, quality, and quantity would be minor.

As described in Section 8.F of this EA, the impacts from the air emissions from this facility would be minor. As a result, the corresponding deposition of the air pollutants on the surrounding vegetation would also be minor. Also, because the associated water resource and soil disturbance would be minimal, as a result of equipment construction and operation (as described in Sections 8.B and 8.C), corresponding vegetative impacts would also be minor.

E. Aesthetics

The crushing/screening operations would be visible and would create additional noise in the area. Permit #3247-00 would include conditions to control emissions, including visible emissions, from the plant. Since the crushing/screening operations would result in minor emissions, would

be portable, would have seasonal and intermittent operations, and would locate within an existing pit, any visual and noise impacts would be minor.

F. Air Quality

The air quality impacts from the crushing/screening operations would be minor because the facility is considered a minor source of air pollution by industrial standards that would locate in an area where similar industrial disturbance has previously occurred and in an area where good air pollutant dispersion would occur. Also, Permit #3247-00 would include conditions limiting the opacity from the plant, as well as requiring water spray bars and other means to control air pollution. Therefore, the air impacts would be minor.

The operations would be limited, by Permit #3247-00, to total emissions of 250 tons/year or less of any regulated pollutant from non-fugitive sources at the plant, in addition to any additional equipment operated at the site. Furthermore, the emissions from this facility would be subject to BACT. For example, the plant would be required to use water to reduce emissions from equipment operations, storage piles, and haul roads. Therefore, air quality impacts would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program (MNHP), Natural Resource Information System (NRIS). The NRIS search identified three species of special concern. However, none were in the vicinity of the project area and no impacts from operation of the crushing/screening plant and associated wash plant would be expected. The defined area, in this case, is defined by the township and range of the proposed site, with an additional one-mile buffer. These species have been identified as the Bald Eagle, the Blue Sucker, and the Spiny Softshell.

While these species are not found within the defined area, the Department chose to address all three species because one of them, the Bald Eagle, could potentially be affected from operations locating greater than 1 mile away from species. According to the 1994 Bald Eagle Management Plan, the home range of the Bald Eagle is typically a radius of 2.5 miles. However, the birds identified by MNHP are approximately 3 miles away from the proposed project site and would not likely be affected by the proposed project. Further, the facility is a portable/temporary source and would only have seasonal and intermittent operations in the area.

Additionally, the Blue Sucker and the Spiny Softshell are identified as being within the Missouri River drainages, the nearest of which is approximately 1 ½ miles away. Because a typical buffering zone is 100 meters (or 1/16 of a mile) and the facility would be approximately 1 ½ miles away (with no corresponding streams near the site and none that flow into the Missouri River), no impacts to these species would be expected to occur. Overall, any impacts to Unique Endangered, Fragile, or Limited Environmental Resources would be minor.

H. Demands on Environmental Resource of Water, Air, and Energy

The crushing/screening operations would only require small quantities of water and energy for proper operation, due to the relatively small size of the facility. Small amounts of water would be used for dust control from the equipment, the stockpiles, and the associated haul roads. Energy demands to operate the facility would be minor because the operation would consist of two diesel generators and a diesel engine, that are considered small by industrial standards, and would consume minor amounts of fuel. Further, as described in Section 8.F. of this EA, pollutant emissions generated from the facility would have only minor impacts on air quality in the

immediate and surrounding area because the facility is relatively small by industrial standards and intermittent and seasonal in operations. Therefore, any impacts would be minor due to the facility's size and the operational conditions that would be incorporated into Permit #3247-00.

I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operations. According to past correspondence from the Montana State Historic Preservation Office, given the previous industrial disturbance in the area, there would be a low likelihood of adverse disturbance to any known archaeological or historic site. Therefore, it is unlikely this facility's operations would affect any known historical or archaeological site at the proposed operational location.

J. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary environmental impacts to the physical and biological aspects of the human environment because the facility would generally have only seasonal, intermittent, and temporary use, and because the facility would be considered a minor source of air pollutants by industrial standards. The facility would generate emissions of particulate matter (PM), PM<sub>10</sub>, oxides of nitrogen (NO<sub>x</sub>), volatile organic compounds (VOC), carbon monoxide (CO), and oxides of sulfur (SO<sub>x</sub>). Noise would also be generated from the site, but would cause minimal disturbance because the site is in an existing pit and in a relatively remote location. Also, the noise generated would be muffled by the gravel pit and from nearby, Highway 87.

The crushing/screening operation would be limited by Permit #3247-00 to total emissions of 250 tons per year or less from all non-fugitive emissions sources operated at any given site. Additionally, any other permits for the existing site would address environmental impacts associated with their operations at the proposed site. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #3247-00.



9. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no action alternative” was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Social Structures and Mores				X		yes
B.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D.	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities			X			yes
G.	Quantity and Distribution of Employment			X			yes
H.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity			X			yes
K.	Locally Adopted Environmental Plans and Goals				X		yes
L.	Cumulative and Secondary Impacts			X			yes

**SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS:** The following comments have been prepared by the Department.

A. Social Structures and Mores

The crushing/screening operation would cause no disruption to the social structures and mores in the area because the source would be relatively small and temporary in nature. Additionally, the equipment would initially be located in a relatively remote location ( $\frac{3}{4}$  of a mile from the nearest home) in a gravel pit that has been previously developed along Highway 87, and would be a minor source of air pollution. Thus, no native or traditional lifestyles or communities would be affected by the proposed project operations and the predominant use of the surrounding area would not change as a result of this project.

B. Cultural Uniqueness and Diversity

The crushing/screening operations would have no impact on the cultural uniqueness and diversity of this area of operation because the use of the site and surrounding area would not change. The facility is a relatively small and temporary source that would be operating at a relatively remote

location. The nearest residence would be approximately  $\frac{3}{4}$  mile away and the nearest town would be Fort Benton, Montana, which is approximately 1 mile Southwest of the proposed location.

Additionally, the proposed operations would be removed from the general population, would be relatively small and portable, and would be locating in an area previously used for such purposes. Therefore, impacts upon the cultural uniqueness and diversity of the area would not occur.

C. Local and State Tax Base and Tax Revenue

The crushing/screening operations would have little, if any, affect on the local and state tax base and tax revenue because the facility would be a temporary source and would be small by industrial standards. The facility would only need three employees to operate, so only minor impacts to the local and state tax base and revenue would be expected from the use of the employees and from the facility production. Furthermore, any impacts to local tax base and tax revenue would be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The proposed crushing/screening project would locate on privately owned land, which has previously been used for the mining of gravel. The surrounding land has been used for grazing activities and growing wheat. Because of the surrounding land use, past land use of the site, and seasonal, temporary, and intermittent use of the facility, only minor effects to agricultural land could be expected. Any such effects would be addressed by Naeseth, as Naeseth owns the land surrounding the site. The land is also adjacent to an existing highway (Highway 87). Further, the crushing/screening operations are relatively small by industrial standards and, thus, would have only a minor impact on local industrial production. Additionally, pollution control would be utilized on equipment operations and production limits would be established to protect the surrounding environment at the initial operating site or any other future area of operation.

E. Human Health

Permit #3247-00 would incorporate conditions to ensure that the crushing/screening operations would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F of this EA, the air emissions from this facility would be minimized by the use of water spray and opacity and production limitations, as established in Permit #3247-00. Therefore, since these conditions would be incorporated into the permit and because the facility is relatively small and would locate in an area with good air dispersion, any associated impacts to human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The crushing/screening operations would not affect any access to recreational and wilderness activities because of its immediate proximity to an improved roadway and historic industrial usage of the area. However, minor effects on the quality of recreational activities may be created by noise from the site. Any noise impacts from the site would be minor, intermittent, and temporary, due to the portable nature of the crushing/screening operations and the operation's proximity to Highway 87.

G. Quantity and Distribution of Employment

Given the relatively small size and portable nature of the operation, the quantity and distribution of employment in this area would only be minimally affected. Naeseth would use three existing employees for the project. Additionally, because the facility is a small and temporary source, any

changes in the quantity and distribution of employment from the use of this relatively small industrial source would be minor and short-lived.

H. Distribution of Population

Given the relatively small size and temporary nature of the crushing/screening operation, the surrounding land usage, and the fact that the facility would be utilizing only three existing employees, the normal population distribution in the area would not be affected.

I. Demands of Government Services

Minor increases would be seen on traffic on existing roadways in the area while the crushing/screening operations are in progress. In addition, government services would be required for acquiring the appropriate permits from government agencies. Demands for government services would be minor.

J. Industrial and Commercial Activity

The crushing/screening operations would represent only a minor increase in the industrial activity in the area because of the relatively small size, portable, and temporary nature of the facility. No additional industrial or commercial activity would result from the crushing/screening operations.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals that would be affected by the proposed project. Therefore, no effects on such plans and goals would be expected.

L. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area because the source is a portable and temporary source. Minor increases in traffic would have minor effects on local traffic in the immediate area, thus, would have a direct effect on the social environment. Because the source is a relatively small and temporary source, only minor economic impacts to the local economy could be expected from the operation of the facility. Thus, only minor (but temporary) cumulative effects would also result to the economic and social resources of the area.

*Recommendation:* An EIS is not required.

*If an EIS is not required, explain why the EA is an appropriate level of analysis:* All potential effects resulting from construction and operation of the proposed facility would be minor; therefore, an EIS is not required. In addition, the source would be applying BACT and the analysis indicates compliance with all applicable air quality rules and regulations.

*Other groups or agencies contacted or which may have overlapping jurisdiction:* Department of Environmental Quality - Permitting and Compliance Division (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and State Historic Preservation Office (Montana Historical Society).

*Individuals or groups contributing to this EA:* Department of Environmental Quality (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau), Montana Natural Heritage Program, and State Historic Preservation Office (Montana Historical Society).

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*Date:* April 14, 2003